

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

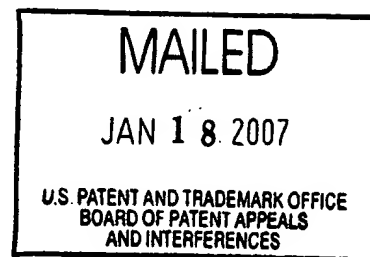
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex Parte BABAK TEHRANCHI

Appeal No. 2006-2583
Application No. 09/656,634

ON BRIEF



Before THOMAS, BLANKENSHIP and MACDONALD, Administrative Patent Judges.

MACDONALD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-3, 5-47, 50-58, and 62-77, which constitute all the claims pending in this application.

The disclosed invention pertains to a method and apparatus for the secure transfer from a digital data source to a digital data receiver of a plurality of data blocks wherein each data block comprises a plurality of frames of a digital video image.

Representative claims 28 and 62 are reproduced as follows:

28. A method for secure transfer of a digital motion image data stream from a digital data source to a digital data receiver, the method comprising:

(a) partitioning the digital motion image data stream into a plurality of digital motion image data blocks;

(b) generating a plurality of encryption keys;

(c) generating an encrypted digital motion image data stream by a repetition of the following steps for each of said plurality of digital motion image data blocks:

(1) encrypting each said digital motion image data block using a distinct encryption key to create an encrypted video data block;

(2) storing said encrypted data block as part of said encrypted digital motion image data stream;

(d) generating a synchronization index that associates each said digital motion image data block with each said distinct encryption key;

(e) providing said encrypted digital motion image data stream to the digital data receiver;

(f) providing said synchronization index to the digital data receiver;

(g) storing the encryption keys at the digital data receiver in a memory; and

(g) said digital data receiver including a decryption engine that is responsive to said synchronization index and the decryption engine mapping each key in a memory to a respective encrypted data block for use in decryption of the respective data block.

62. A data structure for use in providing an encryption key for use in decrypting an image block of encrypted video image, the image block being composed of plural image frames and the encrypted video image being formed of plural image blocks, the data structure comprising:

a component ID field having plural bits mapping information for identifying an image frame of the image block at which a specific encryption key is first used; and

an encryption key field of plural bits forming the encryption key and being operative for use in decrypting the image block.

The examiner relies on the following references:

Handelman et al. (Handelman)	5,774,546	June 30, 1998
Chaum	5,959,717	Sep. 28, 1999
Warren et al. (Warren)	5,963,909	Oct. 05, 1999
Dahan et al. (Dahan)	6,137,763	Oct. 24, 2000 (filed Sep. 24, 1998)
Rabowsky	6,141,530	Oct. 31, 2000 (filed June 15, 1998)
Rump et al. (Rump)	6,735,311	May 11, 2004 (filed Oct. 26, 1998)

Bruce Schneier, Applied Cryptography, Second Edition, Copyright John Wiley & Sons, Inc., 1996, pages 372-373.

The following rejections are on appeal before us¹:

1. Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter of the invention.
2. Claims 62-71 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
3. Claims 28, 30, 32-36, 38-41, 43, 44, 52, 58², 62-69, and 73 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Warren.
4. Claims 1-3, 5-10, 13, 15, 16, 20-25, 27, 29, 47, 51, 57, 58, 72, 74, and 75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Rump.
5. Claims 11 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Handelman.
6. Claims 12, 18, and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren.
7. Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Schneier.
8. Claims 26 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Dahan.

¹ Many of the examiner's rejections reject dependent claims on a lesser number of references than the claims from which they depend. For purposes of this decision, we have treated the examiner's omission of references as an oversight, and we have considered the omitted references as being included in the rejection.

² Since claim 58 depends from claim 47, it will be considered with the rejection of claim 47.

9. Claims 42, 45, 46, 50, 53-56, and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Chaum.

10. Claims 70 and 71 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Warren in view of Rabowsky.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the prior art rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that claim 3 fails to comply with the second paragraph of 35 U.S.C. § 112. We are further of the view that claims 62-71 are not directed to statutory subject matter under 35 U.S.C. § 101. Finally, it is our view that the evidence relied upon supports the examiner's rejection of claims 1-3, 5-17, 28-44, 47, 50-52, 55, 57, 58, 62-77. We reach the opposite conclusion with respect to claims 18-27, 45, 46, 53, 54 and 56. Accordingly, we affirm-in-part.

We consider first the rejection of claim 3 under the second paragraph of 35 U.S.C. § 112. The examiner asserts that there is no antecedent basis for the limitation "said single data block" in claim 3 [answer, page 3].

Appellant responds that the claim itself is clear in that it refers to a data block and one of ordinary skill in the art would consider said single data block to be referring to such data block [brief, pages 6-7]. The examiner responds that appellant cancelled recitations of a single data block in claim 1, but failed to correct claim 3 based on this cancellation [answer, page 17].

We will sustain this rejection of claim 3. Claim 1, from which claim 3 depends, only recites a plurality of data blocks and recitations with respect to each data block. The term “said single data block,” therefore, has no meaning in the context of claim 1 from which it depends. There is no “single data block” to meet the limitations additionally added by claim 3.

We now consider the examiner’s rejection of claims 62-71 under 35 U.S.C. § 101. The examiner asserts that these claims are directed to a data structure which is non-statutory subject matter because it is not embodied within a computer readable medium [answer, page 3]. Appellant argues that the claim as a whole must be considered. Appellant asserts that the claimed data structure is sufficient tangible structure to meet the requirements of 35 U.S.C. § 101 [brief, page 8]. The examiner responds that a data structure by itself is non-statutory subject matter, but that the data structure would be statutory if it was embodied within a computer readable medium [answer, page 17]. Appellant responds that the examiner has still failed to consider the claimed invention as a whole [reply brief, page 3].

We will sustain this rejection of claims 62-71. The following passage is taken from the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” which was published in the Official Gazette of November 22, 2005:

“Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *In re Warmerdam*, 33 F.3d 1360, 1361, 31 USPQ2d 1759, 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.”

We agree with the examiner that the invention of claims 62-71 is directed to a data structure per se and is, therefore, not patentable for reasons set forth in the portion of the published guidelines quoted above.

We now consider the rejection of claims 28, 30, 32-36, 38-41, 43, 44, 52, 58, 62-69, and 73 as being anticipated by Warren. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984); *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983).

The examiner has indicated how these claims are deemed to be fully met by the disclosure of Warren [answer, pages 4-8]. With respect to independent claim 28, appellant argues that Warren fails to provide any

disclosure of a generation of a synchronization index that associates each digital motion image block with each distinct encryption key. Appellant asserts that Warren merely generates an encryption key that is associated with an image data block [brief, page 9]. The examiner responds that Warren provides synchronization because the key stream layer contains the cryptographic keys for the data blocks with an identifier for which block it belongs to [answer, pages 17-18]. Appellant responds that the examiner is attempting to have the encryption keys themselves or at least the stream thereof also comprise the block synchronization index for the encryption keys which, according to appellant, does not meet the language of claim 28. Appellant asserts that there is no index in Warren that meets the recitations of claim 28 [reply brief, pages 3-4].

We will sustain the examiner's rejection of claim 28. We would agree with appellant's argument regarding the claimed synchronization index of Warren if the teachings of Warren were limited to the specific embodiments of Figures 12 and 13. These embodiments show a temporal relationship between the encryption key and the frame it corresponds to such that a synchronization index is unnecessary. However, Warren also discloses that the encrypted frames need not have any particular temporal relationship to the encryption key packets, and that an encryption key can be used to decrypt data from previous, concurrent, and/or subsequent encrypted frames [column 14, line 66 to column 15, line 4]. We find that the disclosure by Warren of a non-temporal relationship requires that a synchronization index be generated to associate a given encryption key with its corresponding frame of data.

With respect to claim 34, appellant argues that Warren fails to disclose a synchronization index, and therefore, does not disclose transmitting the synchronization index [brief, page 10]. The examiner responds that the key stream layer of Warren provides the claimed synchronization index [answer, page 17].

We will sustain the examiner's rejection of claim 34. Since we found above that Warren does teach a synchronization index for the non-temporal embodiments, we are not persuaded by appellant's argument with respect to claim 34.

With respect to claim 35, appellant argues that Warren fails to disclose recording a synchronization index onto the storage medium wherein the synchronization index is as set forth in claim 28.

We will sustain the examiner's rejection of claim 35. Since we found above that Warren does teach a synchronization index for the non-temporal embodiments, we are not persuaded by appellant's argument with respect to claim 35.

With respect to independent claim 36, appellant argues that Warren fails to disclose an identifier that correlates a mapping algorithm to the plurality of encryption keys and the step of operating a decryption engine that is responsive to said identifier and the mapping algorithm to generate each key for use in decryption [brief, page 10]. The examiner responds that while the key stream layer of Warren would be considered to be acting as a synchronization index for the decryption process, the key stream layer is also mapping a specific key to a specific data block for the decryption process [answer, page 18]. Appellant responds that the keys or the data

stream thereof representing such keys in Warren are not an identifier meeting the limitations of claim 36 [reply brief, page 4].

We will sustain the examiner's rejection of claim 36. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that an identifier be provided to map a given encryption key with its corresponding frame of data. We find that such a non-temporal relationship is defined by a mapping algorithm.

With respect to claim 38, appellant argues that the null keys of Warren are not associated with encrypted frames and do not comprise encryption keys that correspond to a plurality of encrypted data blocks [brief, page 11]. The examiner responds that the null keys of Warren meet the broad recitation of claim 38 [answer, pages 18-19].

We will sustain the examiner's rejection of claim 38. We agree with the examiner that the null keys of Warren meet the broad recitations of claim 38.

With respect to claim 39, appellant argues that Warren fails to disclose providing a frame or frame component identification that is used to generate a key from the plurality of keys for use in decrypting the corresponding data block [brief, page 11]. The examiner responds that the keys generated in Warren are frame identifiers [answer, page 19].

We will sustain the examiner's rejection of claim 39. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that a frame identifier be

provided to map a given encryption key with its corresponding frame of data.

With respect to independent claim 52, appellant argues that although Warren relates to MPEG type compression, there is no indication in Warren of a step having the P and B frames be encrypted and generating a corresponding key from the plurality of encryption keys for use in decrypting the image data block that is encrypted [brief, pages 11-12]. The examiner responds that since the entire signal in Warren is encrypted, then the intra coded and P and B frames are encrypted [answer, page 19].

We will sustain the examiner's rejection of claim 52. We agree with the examiner that since Warren discloses that each frame of image data is encrypted, and since MPEG image data is known to include intra-coded, P and B frames, then the encryption disclosed by Warren would include the encryption of intra-coded, P and B frames as claimed.

With respect to independent claim 62, appellant argues that Warren fails to disclose a field that has plural bits mapping information for identifying an image frame of an image block in which a specific encryption key is first used because there is no need for such a field in Warren because there is correspondence between an encryption key and its respective frame or frames through placement on the storage medium [brief, pages 12-13].

We will sustain the examiner's rejection of claim 62. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that a frame identifier be provided to map a given encryption key with its corresponding frame of data. This frame identifier would include the first frame for which a given

encryption key is first used as well as the other frames for that encryption key.

With respect to claim 64, appellant argues that Warren fails to disclose the claimed component ID field and encryption key field because there is no need for such fields in Warren [brief, page 13].

We will sustain the examiner's rejection of claim 64 for the same reasons discussed above with respect to claim 62.

With respect to independent claim 66, appellant argues that Warren provides correspondence between a key and its respective image frame or frames through relative location or placement. Appellant asserts that there is no indication of a data structure providing a key field of respective keys with a synchronization field containing synchronization index information to link individual keys to respective blocks of video image data [brief, pages 13-14].

We will sustain the examiner's rejection of claim 66. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that a synchronization index be provided to map a given encryption key with its corresponding frame of data.

With respect to each of claims 62-71, the issue is presented as to whether a claim that differs from the prior art solely as to "non-functional descriptive material" is novel and/or unobvious under 35 U.S.C. § § 102 and 103. When presented with a claim comprising descriptive material, an Examiner must determine whether the claimed nonfunctional descriptive material should be given patentable weight. The Patent and Trademark

Office (PTO) must consider all claim limitations when determining patentability of an invention over the prior art. In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). The PTO may not disregard claim limitations comprised of printed matter. See Gulack, 703 F.2d at 1384, 217 USPQ at 403; see also Diamond v. Diehr, 450 U.S. 175, 191, 209 USPQ at 10. However, the examiner need not give patentable weight to descriptive material absent a new and unobvious functional relationship between the descriptive material and the substrate. See In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994); In re Ngai, 367 F.3d 1336, 1338, 70 USPQ 1862, 1864 (Fed. Cir. 2004). We conclude that when the prior art describes all the claimed structural and functional relationships between the descriptive material and the substrate, but the prior art describes a different descriptive material than the claim, then the descriptive material is non-functional and will not be given any patentable weight. That is, we conclude that such a scenario presents no new and unobvious functional relationship between the descriptive material and the substrate. In the instant case on appeal, we find that the invention of claims 62-71 recites non-functional descriptive material which does not provide a patentable distinction to the data structure as a structure. In other words, we find that the meaning attributed to the information stored in the data structure cannot be used to distinguish the claimed data structure from a prior art data structure. Therefore, we conclude that the invention of claims 62-71 is not patentably distinguishable from the data structure of the applied prior art.

With respect to independent claim 73, appellant argues that there is no disclosure in Warren of a synchronization index that maps a plurality of encryption keys so that in response to the identification of the image frame and the synchronization index there is output the corresponding key for decrypting of the specific image frame [brief, page 15].

We will sustain the examiner's rejection of claim 73. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that a synchronization index be provided to map a given encryption key with its corresponding frame of data.

We now consider the rejections of the claims under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. 277 F.3d at 1343, 61 USPQ2d at 1433-34. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these

findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. In re Kahn, 441 F.3d 977, 987-88, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (citing In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000)). See also In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision.

Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

We consider first the rejection of claims 1-3, 5-10, 13, 15, 16, 20-25, 27, 29, 47, 57, 58, 72, 74, and 75 based on Warren and Rump. The examiner has indicated how the invention of these claims is deemed to be rendered obvious by the collective teachings of Warren and Rump [answer, pages 8-12]. With respect to independent claim 1, appellant argues that Warren does not disclose a receiver that is responsive to a synchronization index for mapping each key in a memory to a respective encrypted data block for use in decryption of the respective data block. Appellant also argues that the portion of Rump relied on by the examiner is not related to the number of frames within the data block and there is no reason to combine the teachings of Rump with that of Warren to obtain the subject matter of claim 1 [brief, page 17-18]. The examiner responds that Rump discloses data blocks of variable size that comprise a plurality of frames [answer, page 20].

We will sustain the examiner's rejection of claim 1. Warren discloses a synchronization index for reasons discussed above. Since Warren teaches that each frame of data can have a different key or the key can change every so many frames [column 14, lines 7-9], we find that Warren teaches that a data block can comprise a plurality of frames.

With respect to claim 3, appellant nominally appears to argue this claim separately from claim 1, but we can find no arguments specifically directed to the separate patentability of the offset limitation [brief, page 19]. Therefore, we will sustain the examiner's rejection of claim 3.

With respect to claim 15, appellant argues that Warren fails to show the encryption of the encryption key [brief, page 19]. The examiner responds that since the entire data stream of Warren is encrypted, the encryption keys are also encrypted [answer, pages 20-21].

We will sustain the examiner's rejection of claim 15. Since Warren teaches multiple layers of encryption, it would have been obvious to the artisan to encrypt encryption keys for the added security of an additional layer.

With respect to independent claim 20, appellant argues that the examiner's findings are only supported by appellant's own disclosure and constitute a hindsight reconstruction of the claimed invention [brief, pages 19-20]. The examiner responds that the motivation for combining Rump and Warren comes from the references [answer, page 21].

We will not sustain the examiner's rejection of claim 20. We can find nothing in the applied prior art, and the examiner has pointed to nothing, which supports the examiner's finding that the prior art teaches the claimed variable block sizes based on an average size and a randomly generated offset. Since claims 21-27 depend from claim 20, we also do not sustain the examiner's rejection of these claims.

With respect to independent claim 47, appellant argues that there is no disclosure in Warren in using variability in terms of number of frames of motion picture in the image data blocks because once the block size is determined it is fixed for the motion picture. Appellant also argues that Rump provides no indication that the data blocks are of plural frames of

motion pictures but merely that they are of a size determined by a block size index [brief, pages 20-21].

We will sustain the examiner's rejection of claim 47. Since Warren teaches that there can be an encryption key for each frame of data or a single encryption key can correspond to a plurality of frames of data, we find that Warren suggests that the number of frames corresponding to an encryption key can be varied such that the blocks of data are of different sizes as claimed.

With respect to independent claim 72, appellant argues that there is no indication in Warren of a decryption engine that uses the synchronization field and the keys in the key field to create a table or matrix in the memory that maps each key to its respective image block. Appellant also argues that there is no motivation to modify Warren in view of Rump absent appellant's own disclosure [brief, pages 22-23].

We will sustain the examiner's rejection of claim 72. For reasons discussed above with respect to claim 28, we find that the disclosure by Warren of a non-temporal relationship requires that a synchronization index be provided to map a given encryption key with its corresponding frame of data. This index is considered to be a table or a matrix as claimed.

We now consider the rejection of claims 11 and 14 based on Warren, (Rump), and Handelman. Appellant argues that Handelman fails to teach a block synchronization channel or a key transmission channel that uses a smart card [brief, page 24]. The examiner responds that appellant has improperly attacked the references individually [answer, pages 21-22].

We will sustain the examiner's rejection of claims 11 and 14. Since Warren teaches that the encryption keys can be separated from multi-media data, we agree with the examiner that it would have been obvious to the artisan to broadly use smart cards as the data channel for each of the synchronization blocks and data blocks.

We now consider the rejection of claims 12, 18, and 31 based on Warren (and Rump). With respect to claim 12, appellant argues that there is no index disclosed in Warren [brief, pages 15-16].

We will sustain the examiner's rejection of claim 12 since this argument has been decided adversely to appellant for reasons discussed above.

With respect to claim 18, appellant argues that there is no disclosure in Warren of using a pseudo-random number generator [brief, page 16]. The examiner acknowledged that Warren failed to teach this feature, but the examiner found that it would have been obvious to the artisan anyway [answer, page 14].

We will not sustain the examiner's rejection of claim 18 because there is no evidence on this record to support the examiner's finding of obviousness.

With respect to claim 31, appellant argues that there is no index disclosed in Warren [brief, pages 16-17].

We will sustain the examiner's rejection of claim 31 since this argument has been decided adversely to appellant for reasons discussed above.

We now consider the rejection of claim 19 based on Warren, (Rump), and Schneier. Since claim 19 depends from claim 18, we will not sustain the examiner's rejection of claim 19 for reasons discussed above with respect to claim 18.

We now consider the rejection of claims 26 and 37 based on Warren, (Rump), and Dahar. Since claim 26 depends from claim 20, we will not sustain the examiner's rejection of claim 26 for reasons discussed above with respect to claim 20. With respect to claim 37, appellant argues that there is no suggestion in Warren that the encryption keys may be interleaved in a non-sequential order as claimed [brief, page 26].

We will sustain the examiner's rejection of claim 37. Since the examiner cited Dahar for the interleaving teaching, and since appellant has not addressed the teachings of Dahar, we find that appellant has not persuasively rebutted the examiner's rejection.

We now consider the rejection of claims 42, 45, 46, 50, 53-56, and 76 based on Warren, (Rump), and Chaum. With respect to claim 42, appellant argues that Chaum is not concerned with encryption and there is no reason why the artisan would consider this reference [brief, pages 27-28]. The examiner notes that Chaum was cited for its teaching of a projector.

We will sustain the examiner's rejection of claim 42. Since Warren teaches decryption of data at a device and Chaum teaches a projector for receiving video image data, we agree with the examiner that it would have been obvious to the artisan to receive the data in warren at a projector as taught by Chaum.

With respect to claim 45, appellant argues that Chaum is not directed to encryption of data and there is no indication why the artisan would consider the type of system in Chaum for modification of the system of Warren [brief, page 28]. The examiner responds that it would have been obvious to the artisan to encrypt the data in Warren based on color [answer, pages 15-16].

We will not sustain the examiner's rejection of claim 45. We can find nothing in the applied prior art, and the examiner has pointed to nothing, which supports the examiner's finding that the prior art teaches the claimed encrypting of only one of the color components. Since claim 46 depends from claim 45, we also do not sustain the examiner's rejection of claim 46. We also note that the examiner has failed to provide any evidence of the obviousness of claim 46.

With respect to claim 50, appellant makes arguments that we have considered above. Therefore, we will sustain the examiner's rejection of claim 50 for reasons discussed above.

With respect to claim 53, appellant makes the same arguments we considered above with respect to claim 45. Therefore, we will not sustain the examiner's rejection of claim 53. We will also not sustain the examiner's rejection of claim 54 for the same reasons discussed above with respect to claim 46.

With respect to claim 55, appellant argues that there is no teaching of variable block size in Warren [brief, pages 30-31].

We will sustain the examiner's rejection of claim 55 for the same reasons discussed above with respect to claim 47.

We will not sustain the examiner's rejection of claim 56 for the same reasons discussed above with respect to claim 46.

With respect to claim 76, appellant makes the same arguments we have considered above. Therefore, we will sustain the examiner's rejection of claim 76 for the same reasons discussed above with respect to claim 73.

We now consider the rejection of claims 70 and 71 based on Warren, (Rump), and Rabowsky. Appellant argues that there is no indication in the cited references that the name of a movie or theater is provided in a key overhead field as claimed [brief, pages 32-33]. The examiner responds that the teachings of Rabowsky suggest a structural equivalent to the claimed invention [answer, page 23].

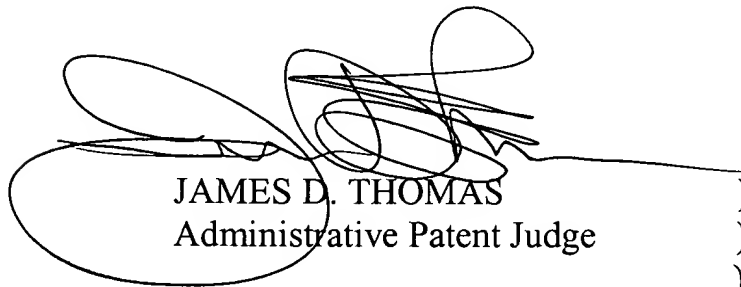
We will sustain the examiner's rejection of claims 70 and 71. Note the discussion above with respect to non-functional descriptive material.

In summary, we have sustained the examiner's rejection of claim 3 under 35 U.S.C. § 112. We have also sustained the examiner's rejection of claims 62-71 under 35 U.S.C. § 101. The examiner's prior art rejections have been sustained with respect to claims 1-3, 5-17, 28-44, 47, 50-52, 55, 57, 58, 62-77, but have not been sustained with respect to claims 18-27, 45, 46, 53, 54 and 56. Therefore, the decision of the examiner rejecting claims 1-3, 5-47, 50-58, and 62-77 is affirmed-in-part.

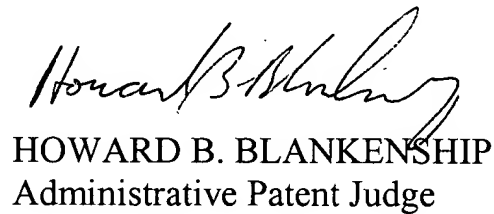
Appeal No. 2006-2583
Application No. 09/656,634

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

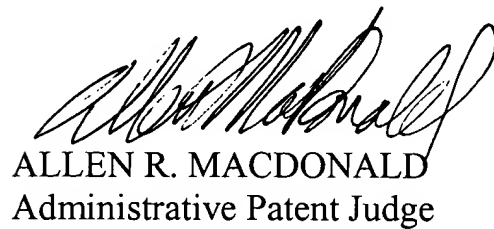
AFFIRMED-IN-PART



JAMES D. THOMAS
Administrative Patent Judge



HOWARD B. BLANKENSHIP
Administrative Patent Judge



ALLEN R. MACDONALD
Administrative Patent Judge

)
)
)
)
)
) BOARD OF PATENT
) APPEALS
) AND
) INTERFERENCES
)
)
)
)
)
)

ARM/kis

Appeal No. 2006-2583
Application No. 09/656,634

PATENT LEGAL STAFF
EASTMAN KODAK COMPANY
343 STATE STREET
ROCHESTER, NY 14650-2201